

## CLAIMS

### **What is claimed is:**

1. A system for generating a data path macro cell comprising:  
memory for storing a text format template;  
controller configured to generate data representing a graphical layout of a data path macro cell;
- 5 controller configured to generate a text format template comprising a variable, based upon said data representing a graphical layout of said data path macro cell;  
controller is further configured to substitute a predetermined value for said variable to generate a text format file representative of a data path macro cell having predetermined characteristics; and
- 10 controller is further configured to generate a data file representing a graphical layout of a data path macro cell represented by said text format file,
2. A system for generating a data path macro cell comprising:  
memory for storing a text format template;
- 15 said text format template comprising a variable;  
a controller configured to retrieve said text format template and substitute a predetermined value for said variable to generate a text format file representative of a data path macro cell having predetermined characteristics; and  
controller is further configured to generate a data file representing a graphical layout
- 20 of a data path macro cell represented by said text format file.
3. The system of claim 2 wherein said text format template comprises a plurality of variables.
- 25 4. The system of claim 3 wherein said controller is further configured to substitute respective predetermined values for said plurality of variables to generate said text format file representative of said data path macro cell.

5. The system of claim 2 wherein said controller is further configured to generate said text format template based upon data representing a graphical layout of a data path macro cell.
- 5 6. The system of claim 4 wherein said controller is further configured to generate said data representing a graphical layout of said data path macro cell.
7. The system of claim 6 wherein said controller is further configured to generate said data representing a graphical layout of said data path macro based upon user  
10 input.
8. The system of claim 2 wherein said controller is further configured to generate a text format template comprising a constant, based upon data representing a graphical layout of a data path macro cell;  
15 said controller is further configured to substitute a variable for said constant to generate said text format template comprising a variable.
9. A method of generating a data path macro cell comprising the steps of:  
retrieving a text format template comprising a variable;  
20 substituting a predetermined value for said variable to generate a text format file representative of a data path macro cell having predetermined characteristics; and  
generating a data file representative of a graphical layout of a data path macro cell represented by said text format file.
- 25 10. The method of claim 9 further comprising the step of generating said text format template based upon data representing a graphical layout of a data path macro cell.
11. The method of claim 10 further comprising the step of generating said data  
30 representing a graphical layout of said data path macro cell.
12. The method of claim 11 further comprising the step of generating said data representing a graphical layout of said data path macro based upon user input.

13. A method of generating a data path macro cell comprising the steps of:  
generating data representing a graphical layout of a data path macro cell;  
generating a text format template comprising a variable, based upon said data  
5 representing a graphical layout of said data path macro cell;  
substituting a predetermined value for said variable to generate a text format  
file representative of a data path macro cell having predetermined characteristics; and  
generating a data file representative of a graphical layout of a data path macro  
cell represented by said text format file.
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14. The method of claim 13 wherein said step of generating a text format template  
comprises the steps of generating a text format template comprising a constant, based  
upon said data representing a graphical layout of said data path macro cell;  
Substituting a variable for said constant to generate a text format template comprising  
15 a variable.
15. A computer program for generating a data path macro cell, the computer  
program comprising:  
a first code segment for retrieving a text format template comprising a plurality  
20 of variables;  
a second code segment for substituting respective values for said variables in  
said text format template to generate a text format file representative of a data path  
macro cell having predetermined characteristics; and  
a third code segment for generating a data representative of a graphical layout  
25 of a data path macro cell represented by said text format file.
16. A computer program according to claim 15 further comprising:  
a fourth code segment for generating said text format template based upon data  
representing a graphical layout of a data path macro cell.
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17. A computer program according to claim 16 further comprising a fifth code  
segment for generating said data representing a graphical layout of said data path  
macro cell.

18. A computer program according to claim 17 further comprising a sixth code segment for generating said data representing a graphical layout of said data path macro based upon user input.

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